

### **R E M A R K S**

Careful review and examination of the subject application are noted and appreciated.

### **SUPPORT FOR CLAIM AMENDMENTS**

Support for the amendments to the claims can be found in the drawings as originally filed. For example, FIG. 5 provides an illustration of macroblock rows (slices) being copied from an input bitstream A to buffers 214 and 216. Block 306 of FIG. 6 provides explicit support for slice rows being copied from the input bitstream to appropriate field buffers. Support for the amendments to the claims can also be found in the specification as originally filed. For example, on page 12, lines 6-8, the specification recites "The slice rows from the signal BITSTREAM\_A are generally de-multiplexed (e.g., alternating copied) to the appropriate field buffer (e.g., the block 306)." As such, no new matter has been introduced.

### **CLAIM REJECTIONS UNDER 35 U.S.C. §112**

The rejection of claims 1-22 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement, is respectfully traversed and should be withdrawn.

Applicant's representative disagrees with the Examiner with regard to the statement that the limitation "wherein the

encoded data for the plurality of vertical lines contained in each macroblock row is unchanged" is not supported by the specification (see pages 2 and 3 of the Office Action). A lack of literal basis in the specification for a negative limitation may not be sufficient to establish a *prima facie* case for lack of descriptive support (MPEP §2173.05(i)). The Examiner states that "Figure. 6 is a flowchart which indicates that macroblock or slice rows are copied from the input bitstream into appropriate field buffers but does not prohibit changing the vertical data thereof" (see page 3 of the Office Action). The Examiner does not present evidence or a logical argument that the flowchart of FIG. 6 requires the encoded data for the plurality of vertical lines contained in each macroblock row be changed.

Furthermore one of ordinary skill in the art would understand copying the slice rows from the input stream into appropriate field buffers to mean accurately reproducing the data of the slice rows in the appropriate field buffer. If the data were changed (as suggested by the Examiner), the data in the buffer would not be considered a copy of the data from the bitstream. Therefore, the description that the macroblock or slice rows are copied from the input bitstream into appropriate field buffers does in fact support the claim limitation that the encoded data for the plurality of vertical lines contained in each macroblock row is unchanged.

Furthermore, the Examiner states:

However, none of the cited portions of the specification prohibit changing the vertical data of the macroblock rows. Further, figure 5 would seem to indicate that the vertical data of the macroblock rows is moved from its location in the frame representation to a new location within the field representation. Therefore, the specification seems to allow some change in the vertical data. The claims will hereinafter be interpreted, in light of this teaching in the specification, and as best understood by the examiner (See page 3, line 19 through page 4, line 3 of the Office Action).

The Examiner's conclusion does not follow from the passages to which the Examiner refers. Specifically, merely because macroblock rows are moved from a location in one buffer to a different location in another buffer does not necessitate or imply in any way that the encoded data for the plurality of vertical lines contained in those macroblock rows is changed. The claim language referenced by the Examiner states that the encoded data for the plurality of vertical lines contained in each macroblock row is unchanged, not that the position of the macroblock rows with respect to one another is unchanged. Simply moving a macroblock row from one buffer to another buffer does not necessarily require that the encoded data within that macroblock row is changed. As such, the Examiner's argument that the specification seems to allow some changes to the vertical data is specious.

Although Applicant's representative does not agree with the Examiner's position, the term "unchanged" has been replaced by

the phrase "a copy of the encoded data for the plurality of vertical lines contained in a corresponding macroblock row in the first encoded bitstream" in order to assist in a better understanding of the claims.

### **CLAIM REJECTIONS UNDER 35 U.S.C. §103**

The rejection of claims 1-22 under 35 U.S.C. §103(a) as being unpatentable over Gryskiewicz et al. (U.S. Patent No. 6,392,712; herein after Gryskiewicz) in view of Boyce et al. (U.S. Patent No. 5,592,299; hereinafter Boyce) and in further view of Kim et al. (U.S. Patent No. 5,926,573; hereinafter Kim) has been obviated by amendment and should be withdrawn.

In contrast to the cited references, the presently claimed invention (claim 1) provides a method for decoding a bitstream including a step of storing the first field header and macroblock rows containing the encoded data for the plurality of vertical lines from a first field of the frame picture in a first field buffer and storing the second field header and macroblock rows containing the encoded data for the plurality of vertical lines from a second field of the frame picture in a second field buffer, where the encoded data for the plurality of vertical lines contained in each macroblock row is a copy of the encoded data for the plurality of vertical lines contained in a corresponding macroblock row in the first encoded bitstream. Claims 10 and 11

recite similar limitations. The combination of Gryskiewicz, Boyce and Kim does not teach or suggest storing the first field header and macroblock rows containing the encoded data for the plurality of vertical lines from a first field of the frame picture in a first field buffer and storing the second field header and macroblock rows containing the encoded data for the plurality of vertical lines from a second field of the frame picture in a second field buffer, where the encoded data for the plurality of vertical lines contained in each macroblock row is a copy of the encoded data for the plurality of vertical lines contained in a corresponding macroblock row in the first encoded bitstream, as presently claimed. Therefore, the combination of Gryskiewicz, Boyce and Kim does not teach or suggest each and every element of the presently claimed invention, as required to support a conclusion of obviousness under MPEP §2143. As such, the presently claimed invention is fully patentable over the cited references and the rejections should be withdrawn.

Specifically, each of the references Gryskiewicz, Boyce and Kim disclose changing the coding and/or the amount of video data from an input stream to an output stream. In particular, Gryskiewicz uses a decoder 102 to decode an interlaced video data stream 120 to obtain the unencoded odd and even video fields (124a and 124b). The unencoded odd and even video fields are combined into a progressive video frame 122. The progressive video frame

122 is mixed with another progressive video frame 130 and sent as an interlaced analog video signal to a display (see FIGS. 1 and 2 and Abstract of Gryskiewicz). Thus, the encoded data for the plurality of vertical lines contained in the data stream 120 of Gryskiewicz is not a copy of the encoded data for the plurality of vertical lines contained in a corresponding macroblock row in the first encoded bitstream, as presently claimed.

Boyce does not cure the deficiencies of Gryskiewicz. Specifically, Boyce states:

The syntax parser receives a digital video data stream, e.g., an MPEG-2 data stream, as an input signal. The syntax parser 102 receives the video data stream which includes data representing, e.g., field pictures and/or frame pictures. The syntax parser 102 parses the received data stream to identify data representing different video frames and to generate as its output MPEG coding elements, e.g., macroblocks including DC and AC DCT coefficients. **The syntax parser 12 may be thought of as performing a partial variable length decode operation in that individual MPEG coding elements are identified in the variable length encoded data stream along with the video frame to which they correspond.** (column 5, lines 38-49 of Boyce).

Boyce further states:

**The data reduction circuit 110 receives the video data representing received video frames from the output of the syntax parser 102 and processes the video frame data to reduce the amount of data to produce a low resolution video frame which uses less data than the corresponding received video frame.** The low resolution video frames generated by the data reduction circuit 110 are supplied to the

recording device 120 which records the low resolution video frames in trick play tape segments on a tape, i.e., tape segments from which data will be read during VTR trick playback operation, e.g., fast forward operation (column 5, lines 50-60 of Boyce).

Since Boyce states that the syntax parser 12 may be thought of as performing a partial variable length decode operation and the data reduction circuit 110 processes the video frame data to reduce the amount of data to produce a low resolution video frame which uses less data than the corresponding received video frame, it follows that the encoded data for the plurality of vertical lines contained in the MPEG-2 data stream of Boyce is not a copy of the encoded data for the plurality of vertical lines contained in a corresponding macroblock row in the first encoded bitstream, as presently claimed.

Kim does not cure the deficiencies of Gryskiewicz and Boyce. Specifically, Kim discloses an apparatus for transforming the resolution of an image from a first image resolution to a second image resolution using operations in the spatial frequency domain (Abstract of Kim). The apparatus converts the bit-stream format which defines the first image and can be used to change the resolution of an MPEG encoded video signal by generating converted macroblocks from original macroblocks (Abstract of Kim). Since Kim discloses changing the resolution of an MPEG encoded video signal by generating converted macroblocks from original macroblocks, it follows that the encoded data for the plurality of vertical lines

contained in the MPEG bit-stream of Kim is not a copy of the encoded data for the plurality of vertical lines contained in a corresponding macroblock row in the first encoded bitstream, as presently claimed. Therefore, the combination of Gryskiewicz, Boyce and Kim does not teach or suggest each and every element of the presently claimed invention, as required to support a conclusion of obviousness under MPEP §2143. As such, the presently claimed invention is fully patentable over the cited references and the rejections should be withdrawn.

Furthermore, modification of Gryskiewicz, Boyce and Kim to copy the encoded data for the plurality of vertical lines contained in an input MPEG bit-stream, as presently claimed, would make the inventions of Gryskiewicz, Boyce and Kim unsuitable for their intended purpose (i.e., changing the coding and/or amount of video data from an input stream to an output stream). Therefore, Gryskiewicz, Boyce and Kim do not provide the suggestion or motivation for such modification (MPEP §2143.01(V)). Thus, the combination of Gryskiewicz, Boyce and Kim does not teach or suggest each and every element of the presently claimed invention, as required to support a conclusion of obviousness under MPEP §2143. As such, the presently claimed invention is fully patentable over the cited references and the rejections should be withdrawn.

Claims 2-9 and 12-22 depend, directly or indirectly, from either claim 1 or claim 11 which are believed to be allowable. As



such, the presently claimed invention is fully patentable over the cited reference and the rejection should be withdrawn.

#### **INCOMPLETENESS OF THE OFFICE ACTION**

Aside from a notice of allowance, Applicant's representative respectfully requests any further action on the merits be presented as a non-final action in light of the incompleteness of the Office Action mailed March 3, 2009. The Examiner failed to consider and give weight to all the limitations of the claims, including limitations which do not find support in the specification as originally filed, when evaluating the claims for obviousness under 35 U.S.C. 103. Specifically, the Examiner clearly states that the added limitation "wherein the encoded data for a plurality of vertical lines contained in each macroblock row is unchanged" was not considered in the present Office Action based on the Examiner's view that there was a lack of written description (see page 10, lines 8-10 of the Office Action). The Examiner's failure to consider and give weight to all the limitations of the claims is improper under MPEP §2143.03(II). Specifically, MPEP 2143.03(II) states:

When evaluating claims for obviousness under 35 U.S.C. 103, all the limitations of the claims must be considered and given weight, including limitations which do not find support in the specification as originally filed (i.e., new matter). *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983) *aff'd mem.* 738 F.2d 453 (Fed. Cir. 1984) (Claim to a catalyst

expressly excluded the presence of sulfur, halogen, uranium, and a combination of vanadium and phosphorous. Although the negative limitations excluding these elements did not appear in the specification as filed, it was error to disregard these limitations when determining whether the claimed invention would have been obvious in view of the prior art.).

Even if no written support for the limitation "wherein the encoded data for a plurality of vertical lines contained in each macroblock row is unchanged" could be found in the specification (as suggested by the Examiner and for which the Applicant's representative does not agree), here as in *Grasselli*, it is error to disregard the limitation when determining whether the claimed invention would have been obvious in view of the prior art (MPEP §2143.03). Since the Examiner explicitly states that all the limitations of the claims were not considered in the Office Action, the Office Action is not complete in all matters and does not provide such information or references as may be useful in aiding the Applicant to judge the propriety of continuing the prosecution or going to appeal, as required under 37 CFR 1.104(a)(2). As such, Applicant's representative respectfully requests that aside from a notice of allowance, any further action on the merits be presented as a non-final action.

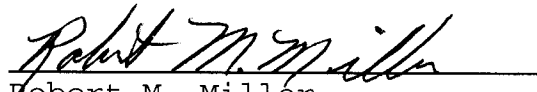
Accordingly, the present application is in condition for allowance. Early and favorable action by the Examiner is respectfully solicited.

The Examiner is respectfully invited to call the Applicant's representative between the hours of 9 a.m. and 5 p.m. ET at 586-498-0670 should it be deemed beneficial to further advance prosecution of the application.

If any additional fees are due, please charge Deposit Account No. 12-2252.

Respectfully submitted,

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